

On page 2 of the Office Action, the Examiner acknowledged that while the specification does not enable "packetizing" resent data and current data to be sent, it does disclose and thus enable multiplexing resent and current data. Consistent with the recognition of this enablement, claim 1 has been amended to recite "sending the requested data with data to be currently sent." (Emphasis added). Since multiplexing is one form of sending data, it is respectfully submitted that the specification enables the method defined in claim 1.

The claims which depend from claim 1 have been amended, where necessary, to recite "sending" instead of packetizing the requested data with the data to be currently sent. It is therefore submitted that these claims are also enabled by the specification.

Independent claims 5 and 13 have been amended in a manner similar to claim 1. It is therefore respectfully submitted these claims and their dependent claims are enabled by the specification. For all the foregoing reasons, withdrawal of the § 112, first paragraph, rejection is respectfully requested.

Applicants further submit that the presently pending claims remain allowable over the Davis patent notwithstanding the amendments presented in this paper. Claim 1, for example, recites the steps of sending a resend request message of a data to a sender, and then sending the requested data with data to be currently sent. The Davis patent does not teach or suggest these features. As discussed at length in the Amendment filed on January 15, 2002, the Davis patent discloses resending only a portion of a data packet that was originally incorrectly sent. The Davis method, however, does not resend this data with data to be currently sent. The approach taken by Davis, therefore, realizes many of the

drawbacks of the conventional systems discussed in the Background of the Invention section of Applicants' specification.

In the Background section, for example, it is noted that conventional methods interrupt a current data-sending process in order to resend data that was improperly received at a receiver. See, for example, page 7, lines 5-12, which discloses:

In the conventional video data sending and resending processes, the normal sending operation must be suspended once the resending operation is advanced. Consequently, the conventional video data sending and resending processes are disadvantageous because if the normal video data sending operation is often suspended for a long time for the video data resending operation, the successive process of the subsequent video data by the sender must also be stopped. (Emphasis added).

The Davis method operates in the same manner as the conventional processes described above and thus realizes all of their disadvantages. Specifically, the Davis method does not resend improperly received data with data originally being sent to a receiver. Instead, Davis suspends the sending of original data in order to resend the improperly received data. This slows down the data transmission process and, as noted above, makes the system susceptible to failure with respect to sending subsequent data.

The claimed invention, on the other hand, overcomes these drawbacks by sending improperly received data with data originally being sent. The invention, therefore, is faster and more efficient than Davis, and is also less susceptible to failure with respect to the

sending of subsequent original data. The claimed invention thus represents a significant improvement in the art.

For at least the foregoing reasons, it is respectfully submitted that claims 1, 5, 13, and their dependent claims are patentably distinguishable from Davis.

It is further submitted that replacing the word "packetizing" with "sending" in the claims removes any issue concerning whether the CONTRAXPAND buffer of the invention performs a packetizing function.

Reconsideration and withdrawal of all the rejections and objections made by the Examiner is hereby respectfully requested.

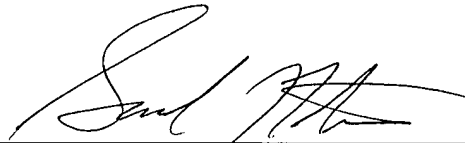
In view of the foregoing amendments and remarks, it is respectfully submitted that the application is in condition for allowance. Favorable consideration and prompt allowance of the application is respectfully requested.

Should the Examiner believe that further amendments are necessary to place the application in condition for allowance, or if the Examiner believes that a personal interview would be advantageous in order to more expeditiously resolve any remaining issues, the Examiner is invited to contact Applicants' undersigned attorney at the telephone number listed below.

To the extent necessary, Applicants petition for an extension of time under 37 CFR § 1.136. Please charge any shortage in fees due in connection with this application, including

extension of time fees, to Deposit Account No. 16-0607 (Attorney Docket No. K-074) and credit any excess fees to the same Deposit Account.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Samuel W. Ntiros', written over a horizontal line.

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Marked-Up Version of the Amended Claims

1. (Amended) A data resending method, comprising [the steps of]:
sending [to] a sender a resend request message of a data; and
sending [packetizing] the requested data with [the] data to be currently sent [and
sending the resultant data packet].
2. (Amended) A method of claim 1, wherein the resend request message
contains values indicating a damaged portion of [the] a data packet originally sent, and
wherein [in] the step of sending [packetizing] the requested data[, packetizing] includes sending
only the damaged portion of the requested data with the data to be currently sent.
4. (Amended) A method of claim 2, wherein said values indicating the damaged
portion indicates a memory address for a range of data packets in a buffer, said range of data
packets corresponding to the damaged portion of the [video] data packet originally sent.
5. (Twice Amended) A video data sending and resending method between a
coder and decoder, comprising:
storing [a] video data in at least one buffer;
packetizing the video data from said at least one buffer and sending the
resultant video data packet to a receiver;
sending to a sender a resend request message of [a] video data if an error is
detected in the sent data; and
sending [packetizing] the requested video data with video data to be currently
sent from said at least one buffer [and sending the resultant data packet] to the receiver.

6. (Twice Amended) The method of claim 5, wherein the resend request message contains values to indicate a damaged portion of the video data packet and wherein only the damaged portion of the requested video data is [packeted] sent with the video data to be currently sent.

8. (Twice Amended) The method of claim 7, wherein the resending request message contains values indicating a memory address and range of block units corresponding to the damaged portion of the video data packet, and

wherein the step of sending [packetizing] the requested video data comprises [packetizing] sending the range of block units corresponding to the damaged portion of the requested video data with the video data to be currently sent, based upon said values.

9. (Twice Amended) The method of claim 7, wherein the resending request message contains values indicating a range of DCT coefficients corresponding to the damaged portion of the video data packet, and wherein [packetizing] the step of sending the requested video data further comprises sending [packetizing] the video data corresponding to the range of DCT coefficients with the video data to be currently sent.

11. (Twice Amended) The method of claim 5, wherein storing the video data further comprises:

storing video data for the current sending in a first buffer; and

storing a previously sent video data in a second buffer,

wherein the step of sending [packetizing] the requested video data further comprises [packetizing] sending the requested video data from the second buffer with the video data to be currently sent from the first buffer.

13. (Twice Amended) A video coding and decoding system, comprising:
at least one buffer;
a video data coding processor storing a compressed video data in said at least

one buffer;

a data sending processor configured to packet the video data from the at least one buffer and transmit the video data packets to the receiver; and

a data receiving processor configured to receive the video data packets and send a resending request message of a video data if an error is detected, wherein the data sending processor is further configured to [packet] send the requested video data with video data to be currently sent from said at least one buffer [and send the resultant data packet] to the receiver.

14. (Twice Amended) The system of claim 13, wherein the resend request message comprises values indicating a damaged portion of the video data packet and wherein the data sending processor sends [packets] only the damaged portion of the requested video data with the video data to be currently sent.

15. (Twice Amended) The system of claim 13, wherein the resent request message comprises values indicating a range of DCT coefficients corresponding to the damaged portion of the video data packet, and wherein the data sending processor sends [packets] a data portion corresponding to the DCT coefficients with the video data to be currently sent.

17. (Twice Amended) The system of claim 16, wherein the resending request message contains values indicating a memory address and range of block units corresponding to the damaged portion of the video data packet, and wherein the data sending processor sends [packets] the range of block units corresponding to the damaged portion of the requested video data with the video data to be currently sent, based upon said values.

19. (Twice Amended) The system of claim 13, further comprising:
a first buffer configured to store video data for the current sending; and
a second buffer configured to store a previously sent video data,

wherein the data sending processor sends [packets] the requested video data from the second buffer with the video data to be currently sent from the first buffer.

23. (Amended) The method of claim 1, wherein the step of sending the requested data includes multiplexing the requested data [is multiplexed] with the data to be currently sent [to form the resultant data packet].

24. (Amended) The method of claim 1, wherein the [resultant] multiplexed data [packet] is sent over a single channel to a receiver.

25. (Amended) The method of claim 5, wherein the [resultant data packet is sent] step of sending the requested video data includes sending the requested video data with the video data to be current sent to the receiver over a single channel.

26. (Amended) The method of claim 5, wherein the step of sending [packetizing] the requested data with data to be currently sent comprises multiplexing the requested data with the data to be currently sent.

27. (Amended) The system of claim 13, wherein the data sending processor and the data receiving processor are coupled over a single channel, and wherein the [resultant data packet is] requested data and the data to be currently sent are sent on the single channel.